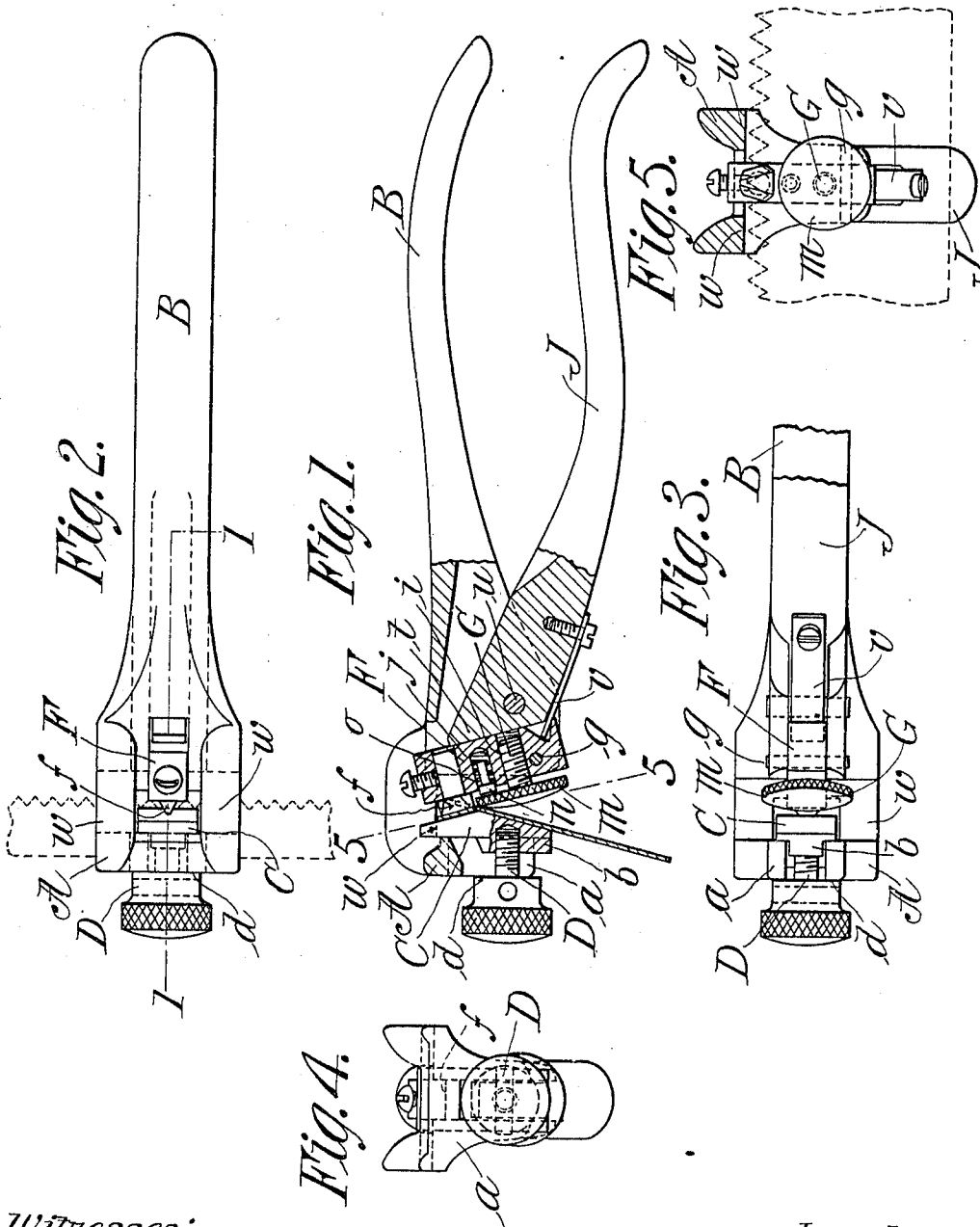


984,478.

Patented Feb. 14, 1911.



Witnesses:

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UNITED STATES PATENT OFFICE.

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SAW-SETTING DEVICE.

984,478.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALBERT D. GOODELL, a citizen of the United States of America, and resident of Shelburne Falls, in the county of Franklin and State of Massachusetts, have invented certain new and useful Improvements in Saw-Setting Devices, of which the following is a full, clear, and exact description.

This invention relates to devices for setting saws, and an object of the invention is to provide an improved adjustable gage or stop so that the throw or working thrust of the movable member of the device which carries the saw setting tool may be regulated for securing an offsetting of the alternate teeth of the saw with uniformity and in greater or less extent as desired,—provision being also made in conjunction with the readily operable adjustable gage for frictioning or tensioning it so that its predetermined adjustment will not be accidentally changed.

Another object of the invention is to provide the anvil block, with which the saw setting tool coacts and which has an angular face toward the setting tool, which is bodily adjustable along a line at approximately right angles to the line of movement of the setting tool, with efficient and convenient means for holding it in its adjustment so that the device may be made adaptable for operation on saws having teeth of widely varying lengths. And a further object of the invention is to so construct the saw setting device that it is of simple and inexpensive construction, and susceptible of long continued use without derangement.

The invention is described in conjunction with the accompanying drawings and is set forth in the claims.

In the drawings:—Figure 1 is substantially a central vertical longitudinal sectional view of the saw setting device. Fig. 2 is a plan view; Fig. 3 is a plan view showing the under side of the device; Fig. 4 is a view of the front end; and Fig. 5 is a vertical cross section as taken on line 5—5, Fig. 1, and showing parts in elevation as seen to the rear thereof.

Similar characters of reference indicate corresponding parts in all of the views.

In the drawings, A represents the head provided with a rearwardly projecting handle extension B and having at its forward

portion a depending bifurcated member *a* which is equipped with an anvil block C, which is constructed at its forward side with a rib *b* which has a vertical sliding engagement between the separated legs of the depending bifurcated portion of the head A.

The anvil block has an angular rearward face as indicated in Fig. 1; and it is held in any of its bodily adjustable positions on the head by the screw D, the shank of which passes between the separated legs of the bifurcated member *a* and has a screw thread engagement into the anvil block, while the shoulder *d* of the screw which adjoins its head has a setting up engagement against the front face of the legs of the said bifurcated portion of the head, so that when the screw D is properly tightened the anvil block is confined in either its high or lower position on and as a fixed part of the head.

F represents the member which carries the forwardly projecting saw setting tool *f* which has a V-shape and projects forwardly from the member F toward the anvil block. This member F consists of a substantially rectangular block accommodated in a recess therefor in a portion of the head to the rear of, and separated from, the aforementioned bifurcated anvil block carrying member *a*, and the same is pivotally mounted on and between the side walls of the head by the transverse pin *g*.

The swinging tool carrying block or member F is provided with a forwardly opening threaded hole *i* and with a forwardly opening socket *j* alongside thereof; and a screw G having a wide flange like head *m* is adjustably engaged in the threaded hole *i* in the tool carrying block, while its head overlies the socket *j* in which is a shouldered stud *n* relatively to which operates an encircling spring *o* which exerts an outward forcing pressure on the stud so that the head of the latter has a frictional engagement with the rear surface of the head *m*, of the screw G, and whereby the stud spring pressed from the rear becomes a tensioning element which coacts with the screw G, which latter is to be understood as an adjustable gage for limiting the extent of movement which the tool carrying block may have relatively to the anvil block.

J represents a lever handle pivoted at *u* within the head which is recessed therefor, to the rear of the tool carrying block F,—

the forward upper extremity, or nose, *t* having an impingement against and for imparting a forward swinging movement to the tool carrying block every time the lever handle J is swung upwardly relatively to the handle extension B of the head.

v represents a retracting spring applied between and for coaction with the forward portion of the lever J and the tool carrying block and operable for returning such block rearwardly away from the anvil block after every forcible forward thrust of the tool carrying block by the upswinging of the lever.

The saw to be set will be usually clamped edgewise upright in a vise, and the head brought in relation to the teeth with the anvil block and setting tool at opposite sides of the teeth; the upper bridging portion *w* of the head serving as a gage for bringing the device always in the same relation to the horizontal line coincident with the tooth points; the handle extension held onto the palm of the hand is relatively worked to by the operating lever J which is successively drawn upwardly by the fingers, with the result of causing the block F to be swung to carry the tool against the tooth of the saw and to set it toward or against the anvil block, the breaking point of the tooth being governed by the point of intersection of the angular faces at the rear side of the anvil block.

If the tooth is a long or a deep one, the anvil block is adjusted to a comparatively high position on the forward bifurcated member *a* of the head, whereas for short teeth the anvil block is placed in a lower position of its adjustment. If the teeth are to be much offset the screw which constitutes the gage is turned inwardly to a rearward position on the tool carrying head and farther away from the anvil block so that in consequence the tool carrying member may have under the operation of the handle lever a long swing, while if the teeth of the saw are to have but little offset the screw gage is turned forwardly so that it will abut against the rear face of the anvil block after the tool carrying member has had a correspondingly short swing. And in whatever position of adjustment the gage constituting screw G may be positioned, it will

be there retained reliably and against liability of accidental change by the spring pressed tensioning stud.

I claim:—

1. In a saw setting device, opposed members one of which is adapted for swinging movements toward and from the other, and means for imparting such movements thereto, the swinging member having at its front a saw setting tool and also provided at its front with a threaded hole, and a forwardly opening socket alongside thereof, a screw, having a widely overhanging head, the shank of which is adjustably engaged in said threaded hole, while its head overlies said socket, a stud having its shank in said socket and having a spring in the latter for forcing said stud forwardly to a frictional engagement with the surface of the overhanging screw head, the opposite member of the device being provided with an anvil block having a face toward the said swinging tool carrying member.

2. In a saw setting tool, a head provided with a rearwardly extending handle, and having at its forward portion a depending bifurcated member, an anvil block having an angular rearward face and having at its forward side a rib for a vertical sliding engagement in said bifurcated member, a headed screw the shank of which passes between the separated portions of the bifurcated member and with a thread engagement into the anvil block, the shoulder of the screw adjoining its head having an engagement against the front of said depending bifurcated member, a block, carrying a saw setting tool, pivoted in said head to the rear of the anvil block, and having a gage screw the head of which forwardly protrudes toward the anvil block, a lever pivoted to the handle provided head for imparting a swinging movement to the tool carrying block, and a retracting spring coacting between the lever and tool carrying block.

Signed by me at Shelburne Falls in presence of two subscribing witnesses.

ALBERT D. GOODELL.

Witnesses:

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